BRUHATH BANGALORE MAHANAGARA PALIKE

YALAHANKA ELECTRICAL DIVISION

E MEASUREMENT BOOK

Name of work:- Providing Energy efficent LED street lights and control switches and connected Accessories Dasarahalli areas in Ward no 6.

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Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work: :- Providing Energy efficent LED street lights and control switches and connected Accessories Dasarahalli areas in Ward no 6.

Name of Contractror of nature of Agency:- M/s,Mathashree Electricals,

Job Code No:- 006-19-000029

Ref no and Date of commencement of work:-EE/YZ/WO/000031/ 2019-20Date:- 27/08/2019

Measurement Book No: **Page No:**

Bill NO :-

Sl. No.	Description of item	Unit	Present Measurements		
			Qty	Tender Full Rate	Cost
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II. LED Streetlight 65watt	Nos	1	15000.00	15000.00
2	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.200mmx200mmx98mm	Nos	37	2000.00	74000.00
3	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE 100Amps25kA.	Nos	37	3500.00	129500.00
1	GE/06/TC/AN/06/01/S	ASHWATHNAGAR				
2	GE/06/AN/00/04/06/S	4TH MAIN ROAD CHIKKANNA LAYOUT				
3	GE/06/TC/AN/00/06/11/S	6TH CROSS THANISANDRA HUNSE MARADA APPANNA BADAVANE				
4	GE/06/TC/AN/00/07/03/S	7TH CROSS SANCHARA NAGARA ROAD NARAYANASWAMY BADAVANE THANISANDRA				
5	GE/06/TC/TL/01/00/10/S	MASEEDI ROAD TR AUTO GAURAGE				
6	GE/06/TC/MB/SC/02/S	MANJUNATH LAYOUT NAGAVARA MAIN ROAD				

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7	GE/06/TC99/ML/00/06/05/S	MANJUNATH LAYOUT MANJUNATH ENTERPRISES				
8	GE/06/FL/LC/03/S	BARATHNAGAR THANISANDRA MAIN ROAD NARAIPALYA				
9	GE/06/TC/02C/07/S	BARATHNAGAR THANISANDRA				
10	GE/06/TC/AN/010/0/S	Appanna Badavane				
11	GE/06/TC/TS/SR/12/F					
12	GE/06/TC/VN/01/03/02/S	3RD CROSSVIDYANAGAR THANISANDRA				
13	GE/06/TC/VN/01/01/01/S	1RD CROSSVIDYANAGAR THANISANDRA				
14	GE/06/TC/RM/00/04/02/F	RAILWAY MAIN ROAD THANISANDRA				
15	New Pole	RAILWAY MAIN ROAD THANISANDRA				
16	GE/06/TC/RL/00/01/02/S	#13,RAILWAY MAIN ROAD THANISANDRA OPP SRIKRISHNA HOUSE				
17	GE/06/TC/TC/TS/02/00/06/S					
18	GE/06/TC/KTR/13/S	2ND MAIN ROAD KATIRAMMA DEVI THANISANDRA				
19	GE/06/TC/TL/02/00/07/S	2ND MAIN ROAD SANCHARA NAGAR THANISANDRA				
20	GE/06/TC/KN/00/01/01/S	1ST CROSS KAVERINAGAR THANISANDRA				
21	GE/06/KN/BC/07/S	3ST CROSS KAVERINAGAR THANISANDRA				
22	GE/06/TC/PN/00/01/07/S	1ST CROSS PRAKASH NAGAR THANISANDRA				
23	GE/06/TC/NMR/06/S	K NARAYANAPURA MAIN ROAD THANISANDRA				
24	GE/07/TC65/GTR/09/S	Chikkasiddappa L/o, Amruthahalli				
25	GE/07/TC124/ML/03/S	Near # 04, 1st Main, Muneshwara L/o,				
26	GE/07/TC76/TKL/04/00/15/S	Near # 406, 4th Cross, Shiva temple,				
27	New Pole	Mariyannapalya church inside				
28	GE/06/TC/ML/02/01/S	England apartment road, 2nd Cross, Dasarahalli main road				
29	GE/06/TC/DMR/02/01/F	# 05/1/A, Chowdeshwari complex, Dasarahalli main road				
30	New Pole	No 05, Cauvery L/o, Dasarahalli				
31	GE/06/TC/AL/AR/02/S	# 09, Kalavary betta road, Dasarahalli				
32	GE/06/TC/CL/01/00/03/S	2nd Cross, Chowrappa Reddy L/o, Mariyannapalya, Dasarahalli				
33	GE/06/TC14/HL/02/00/15/S	Back side of Shiva temple, Amruthahalli				
34	GE/06/TC/RNC/MR/00/07/S	M S Ramaiah North City				
35	GE/06/TC/RNC/02/05/S	No 623, 2nd Main, 5th Cross				
36	GE/06/TC/RNC/09/09/S	No 623, 2nd Main, 5th Cross M S Ramaiah North City				
37	GE/06/TC/TS/AN/00/07/S	Anjaneya temple road, Thanisandra				
4	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.25 sqmm Long Barrel		Nos	97	15.00	145
5	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable. 3.5 core 25 sqmm		Mtrs	371	100.00	371
6	Labour charges for laying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct. 6 sqmm to 16 sqmm		Mtrs	371	10.80	40
7	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. a)50X50X6 mm		Mtrs	37	150.00	55

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	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).		Mtrs	4991	20.00	99820.00
	GE/06/TC/AJL/02/S TO GE/06/TC/AJL/09/S Anajandhri L/o, Rachenahalli main road, Thanisandra	7 Spans 244 Mtrs				
	GE/06/TC/AJL/1AC/08/S TO GE/06/TC/AJL/1AC/07/S 1st A Cross, Anajandhri L/o, Rachenahalli main road, Thanisandra	7 Spans 229 Mtrs				
	GE/06/TC/AJL/1AC/01/S toGE/06/TC/AJL/00/03/01/S	2 Spans 66 Mtrs				
	GE/06/TC/AJL/2AC/01/S TO GE/06/TC/AJL/2AC/11/S 2nd A Cross, Anajandhri L/o, Rachenahalli main road, Thanisandra	10 Spans328 Mtrs				
	GE/06/TC/CL/00/01/01/S TO GE/06/TC/CL/00/01/05/S 1st Cross, Chowrappa L/o, Mariyannanapalya	4 Spans131 Mtrs				
	GE/06/TC/CL/01/05/01/S to06 3rd Cross, Chowrappa L/o, Mariyannanapalya	5 Spans193 Mtrs				
	GE/06/TC/CL/01/00/01/0to 07/s & New pole 1st Main, Chowrappa L/o, Mariyannanapalya	8 Spans285 Mtrs				
	GE/06/TC/AL/00/02/04/F to 01, 2nd Cross, Akashavani L/o, Dasarahalli	4 Spans140 Mtrs				
	GE/06/TC/449/MSR/00/11/S to New pole M S Ramaiah L/o	2 Spans70 Mtrs				
	GE/06/TC/KMR/00/09/S TO GE/06/TC/KMR/00/10/S Kemepegowda Main road, Dasarahalli	5 Spans170 Mtrs				
	GE/06/TC/SL/00/04/01/S TO GE/06/TC/SL/00/04/04/S to 2 New poles Mariyannanpalya Village	5 Spans175 Mtrs				
	GE/06/TC/SL/01/00/04/S TO GE/06/TC/SL/01/00/01/S	3 Spans141 Mtrs				
	GE/06/TC/SL/00/00/01/S TO GE/06/TC/SL/00/00/13/S Mariyannanpalya Village	1 Spans38 Mtrs				
	GE/06/TC/KMR/00/13/L to new pole Mariyannanpalya Village	2 Spans60 Mtrs				
	GE/06/TC/DMR/00/01/S TO GE/06/TC/DMR/00/10/S Dasarahalli main road	9 Spans278 Mtrs				
	GE/06/TC/DMR/02/01/F TO GE/06/TC/DMR/02/04/FDasarahalli main road	3 Spans99 Mtrs				
	GE/06/TC/ML/00/01/04/S TO GE/06/TC/ML/00/01/03/S Munikempapanna L/o, Dasarahalli	4 Spans130 Mtrs				
	GE/06/TC/DMR/09/S TO GE/06/TC/DMR/17/S Dasarahalli main road	8 Spans249 Mtrs				
	GE/06/TC/ML/00/02/02/S TO GE/06/TC/ML/00/02/01/S	1 Spans 30 Mtrs				
	GE/06/TC/ML/00/02/01/S TO GE/06/TC/ML/00/02/012/S0	1 Span 30 Mtrs				
	GE/06/TC/DMR/12/0/	1 Span 34 Mtrs				
	New Pole	1 Span 33 Mtrs				
	GE/06/TC/DMR/MKL/01/00/01/0 TO GE/06/TC/DMR/MKL/01/00/03/0	2 Span 50 Mtrs				

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	GE/06/TC/DMR/MKL/01/00/03/0 TO GE/06/TC/DMR/MKL/01/00/07/0	2 Span 69 Mtrs				
	GE/06/TC/DMR/MKL/02/07/S to New Pole	1 Span 30 Mtrs				
	GE/06/TC/DMR/MKL/01/01/0 TO GE/06/TC/DMR/MKL/01/08Munikempanna Layout, Dasarahalli main road/0	7 Span 207 Mtrs				
	GE/06/TC/MKL/01/08/S to New pole	2 Span 64 Mtrs				
	A Narayanaswamy L/o to Telecom L/o main road Thanisandra	34 Span 1183 Mtrs				
	GE/06/TC/AN/00/7A/01/S to 04/s 7th A Cross, A Narayanaswamy L/o to Telecom L/o main road Thanisandra	4 Span 140 Mtrs				
	GE/06/TC/AN/00/06/20/S to New pole 6th Cross, A Narayanaswamy L/o to Telecom L/o main road Thanisandra	2 Span 70 Mtrs				
	GE/06/TC/AN/00/07/01/S TO GE/06/TC/AN/00/07/08/S 7th Cross, A Narayanaswamy L/o to Telecom L/o main road Thanisandra	8 Span 280 Mtrs				
	GE/06/TC/AN/TLR/18/S TO GE/06/TC/AN/TLR/15/S	4 Span 138 Mtrs				
	Total 4996 Mtrs					
9	1.1 KV Pin Insulator		Nos	161	35.00	5635.0
10	No. 8 Strain Insulator		Nos	50	10.00	500.00
11	2 Pin 45x45x5mm -510mm		Nos	165	270.00	44550.0
12	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.(Make :SANSAM)		Nos	9	47000.00	423000.0
		Total Rs				**840116.8**

CERTIFICATE:

1.This is certify that the work done is saticefactorily.
2.This is certify that the bill amount calimed in this bill does not claimed in any

Junior Engineer(Elec),
Yalahanka Division

Asst.Exe.Engineer(Elec)
Yalahanka Division

Executive Engineer
Electrical Division
Yelahanka Zone BBMP
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